

LISTING OF THE CLAIMS

1. (Currently Amended) A device for clamping and ablating cardiac tissue to form a transmural lesion therein, comprising:

    a first handle member;

    a second handle member;

    first and second jaw members associated with the first and second handle members, respectively, the jaw members being movable by the handle members between a first open position to receive tissue therebetween and a second clamped position compressing the tissue, the jaw members having opposed clamping surfaces, each clamping surface having a width;

    a first elongated electrically conductive member carried by the first jaw member;

    a second elongated electrically conductive member carried by the second jaw member;

    the first and second conductive members each comprising a tissue contacting portion having a width, said width of said portion being less than or equal to about one-third the width of its associated clamping surface and being adapted to be connected to an RF energy source so that, when activated, the first and second conductive members conduct electrical current through tissue clamped between the jaw members, the electrical current for ablation being conducted solely by the electrically conductive members, the respective first and second jaw members being adapted

to contact cardiac tissue without penetrating such tissue along the clamping surfaces.

2. (Cancelled)

3. (Previously Presented) The device of claim 1 wherein the conductive members are between approximately 3 to 8 cm in length and said portion of the ablation members is between approximately 0.12 to 0.6 mm in width.

4. (Currently Amended) A tissue grasping apparatus for forming a transmural lesion in cardiac tissue, comprising:

first and second grasping jaws, the grasping jaws being relatively moveable between open and closed positions, respectively, to receive and compress tissue therebetween; each jaw having a width and including an elongated electrically conductive member and a clamping surface in face-to-face relation with the electrically conductive member and clamping surface of the other jaw; the face-to-face electrically conductive members being connectible to an RF energy power source for providing an electrical current through tissue clamped between the jaws, the electrically conductive members having a tissue contacting portion having a width, said width of said portion being less than or equal to about one-third the width of the clamping surface of its associated jaw, the electrical current for ablation being conducted solely by the electrically conductive members, the respective first and second grasping jaws being adapted to contact cardiac tissue without penetrating such tissue along the clamping surfaces.

5. (Cancelled)

6. (Previously Presented) The apparatus of claim 4 wherein the conductive members are between approximately 3 to 8 cm in length and said portion of the ablation members is between approximately 0.12 to 0.6 mm in width.

7. (Previously Presented) The device of claim 1 wherein each jaw member has a facing, tissue-engaging non-conductive surface and the elongated conductive member is generally centrally located relative to such surface.

8. (Previously Presented) The device of claim 1 wherein each clamping surface has a generally centrally located slot extending along the jaw member.

9. (Previously Presented) The device of claim 1 in which each conductive member is at least partially disposed within the respective jaw member.

10. (Previously Presented) The device of claim 8 in which at least a portion of the conductive member extends through the slot to contact tissue clamped between the jaw members.

11. (Cancelled)

12. (Previously Presented) The device of claim 1 in which at least one of the conductive members defines an interior lumen.

13. (Previously Presented) The device of claim 1 in which at least one of the conductive members is a wire.

14. (Previously Presented) The device of claim 1 in which at least one of the conductive members has a convex tissue-engaging surface.

15. (Cancelled)

16. (Cancelled)

17. (Previously Presented) The apparatus of claim 4 wherein each jaw has a facing, tissue-engaging non-conductive surface and the elongated conductive member is generally centrally located relative to such surface.

18. (Previously Presented) The apparatus of claim 4 wherein each clamping surface has a generally centrally located slot extending along the jaw.

19. (Previously Presented) The apparatus of claim 4 in which each conductive member is at least partially disposed within the respective jaw and current flows through the slot to tissue clamped between the jaws.

20. (Previously Presented) The apparatus of claim 18 in which at least a portion of the conductive member extends through the slot to contact tissue clamped between the jaws.

21. (Cancelled)

22. (Previously Presented) The apparatus of claim 4 in which at least one of the conductive members defines an interior lumen.

23. (Previously Presented) The apparatus of claim 4 in which at least one of the conductive members is a wire.

24. (Previously Presented) The apparatus of claim 4 in which at least one of the conductive members has a convex tissue-engaging surface.

25. (Cancelled)

26. (Cancelled)

27. (Previously Presented) The device of claim 1 in which the first jaw member has a clamping area on either side of the conductive area of the conductive member.

28. (Previously Presented) The device of claim 27 in which the second jaw member has a clamping area on either side of the conductive area of the conductive member.

29. (Currently Amended) A device for clamping and ablating cardiac tissue to form a transmural lesion therein, comprising:

a first handle member;

a second handle member;

first and second jaw members associated with the first and second handle members, respectively, the jaw members being movable by the handle members between a first open position to receive tissue therebetween and a second clamped position compressing the tissue, the jaw members having opposed clamping surfaces, each clamping surface having a width;

a first elongated electrically conductive member carried by the first jaw member;

a second elongated electrically conductive member carried by the second jaw member;

the first and second conductive members each comprising a tissue contacting portion having a width, said width of said portion being less than the width of its associated clamping surface and disposed with a portion of the respective clamping surface on each side of the conductive member, and the conductive members being adapted to be connected to an RF energy source so that, when activated, the first and second conductive members conduct electrical current through tissue clamped between the jaw members, the electrical current for ablation being conducted solely by the first and second conductive members, the respective first and second jaw members being adapted to contact cardiac tissue without penetrating such tissue along the clamping surfaces.

30. (Previously Presented) The device of claim 29 wherein the conductive members are between approximately 3 to 8 cm in length and said portion of the conductive members is between approximately 0.12 to 0.6 mm in width.

31. (Currently Amended) A tissue grasping apparatus for forming a transmural lesion in cardiac tissue, comprising:

first and second grasping jaws, the grasping jaws being relatively moveable between open and closed positions, respectively, to receive and compress tissue therebetween; each jaw having a width including an elongated electrically conductive member and a clamping surface in face-to-face relation with the

electrically conductive member and clamping surface of the other jaw; the face-to-face electrically conductive members being connectible to an RF energy power source for providing an electrical current through tissue clamped between the jaws, the electrically conductive members having a tissue contacting portion having a width, said width of said portion being less than the width of the clamping surface of its associated jaw and disposed with a portion of the respective clamping surface on each side of the conductive member, the electrical current for ablation being conducted solely by the electrically conductive members, the respective first and second grasping jaws being adapted to contact cardiac tissue without penetrating such tissue along the clamping surfaces.

32. (Previously Presented) The apparatus of claim 31 wherein the electrically conductive members are between approximately 3 to 8 cm in length and said portion of the electrically conductive members is between approximately 0.12 to 0.6 mm in width.

33. (Previously Presented) The device of claim 29 wherein each jaw member has a facing, tissue-engaging non-conductive surface and the elongated conductive member is generally centrally located relative to such surface.

34. (Previously Presented) The device of claim 29 wherein each clamping surface has a generally centrally located slot extending along the jaw member.

35. (Previously Presented) The device of claim 29 in which each conductive member is at least partially disposed within the respective jaw member.

36. (Previously Presented) The device of claim 34 in which at least a portion of the conductive member extends through the slot to contact tissue clamped between the jaw members.

37. (Previously Presented) The device of claim 29 in which at least one of the conductive members defines an interior lumen.

38. (Previously Presented) The device of claim 29 in which at least one of the conductive members is a wire.

39. (Previously Presented) The device of claim 29 in which at least one of the conductive members has a convex tissue-engaging surface.

40. (Previously Presented) The apparatus of claim 31 wherein each jaw has a facing, tissue-engaging non-conductive surface and the elongated conductive member is generally centrally located relative to such surface.

41. (Previously Presented) The apparatus of claim 31 wherein each tissue engaging surface has a generally centrally located slot extending along the jaw.

42. (Previously Presented) The apparatus of claim 31 in which each conductive member is at least partially disposed within the respective jaw and current flows through the slot to tissue clamped between the jaws.

43. (Previously Presented) The apparatus of claim 41 in which at least a portion of the conductive member extends through the slot to contact tissue clamped between the jaws.

44. (Previously Presented) The apparatus of claim 31 in which at least one of the conductive members defines an interior lumen.

45. (Previously Presented) The apparatus of claim 31 in which at least one of the conductive members is a wire.

46. (Previously Presented) The apparatus of claim 31 in which at least one of the conductive members has a convex tissue-engaging surface.

47. (Previously Presented) A tissue grasping apparatus for forming a transmural lesion in cardiac tissue, comprising:

first and second grasping jaws, the grasping jaws being relatively moveable between open and closed positions, respectively, to receive and compress tissue therebetween; each jaw having an elongated electrically conductive member in face-to-face relation with the electrically conductive member of the other jaw; the face-to-face electrically conductive members being connectible to RF energy power source for providing an electrical current through tissue clamped between the jaws, at least one of the electrically conductive members defining an interior lumen, the electrically conductive members being disposed to contact tissue, the electrical current for ablation being conducted solely by the electrically conductive members.

48. (Previously Presented) The apparatus of claim 47 in which each conductive member defines an interior lumen.

49. (Previously Presented) The apparatus of claim 47 further comprising insulation substantially covering the exterior surface of the conductive member except for a longitudinally exposed area for conducting energy through tissue clamped between the jaws.